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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,158	10/31/2003	Jeffrey D. Carnevali	NPI-019	9849

7590 04/21/2005
Charles J. Rupnick
PO Box 46752
Seattle, WA 98146

EXAMINER

STERLING, AMY JO

ART UNIT	PAPER NUMBER
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3632

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/698,158

Applicant(s)

CARNEVALI, JEFFREY D.

Examiner

Amy J. Sterling

Art Unit

3632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This is the **Final Office Action** for application number 10/698,158 Flexible Support Arm, filed on 10/31/03. Claims 1-21 are pending. This **Final Office Action** is in response to applicant's reply dated 1/21/05. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The amendments necessitated the new grounds of rejection.

Claim Rejections - 35 USC § 102

Claims 1-4, 8, 9 and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 6648376 to Christianson.

The patent to Christianson discloses a flexible support having a metal and plastic support base (14, lower end of 20) with a tubular aperture opening in one surface, a metal and plastic mounting bracket (12, upper end of 20) having an tubular aperture opening in one surface and a permanently bendable solid metal rod (the rod portions are solid) (16, See Col. 2, line 4 for material selection) having a first end installed in the opening of the support base (14) and fused directly by ultrasonic welding (See Col. 6, lines 55-56) or metal-to-metal fusible, to the support base and having a second end installed in the opening of the mounting bracket and fused directly by ultrasonic welding to the mounting bracket (12), and a flexible plastic sheath (10). Christianson teaches that the support base and mounting bracket openings further comprise a second larger counter-bored opening into which an end of the sheath is inserted.

Christianson also discloses the method of forming a support base (14) having a tubular aperture therein and forming a mounting bracket (12) with a tubular aperture therein and fusing the ends of a permanently bendable solid metal rod (16) to both of the apertures.

Claim Rejections - 35 USC § 103

Claims 5, 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 6648376 to Christianson as applied to claims 1, 2 and 4 above and further in view of United States Patent No. 4020575 to Kruger et al.

Christianson teaches the basic inventive concept including that the mounting bracket (12, 20) and the support base (14, 20) include plastic.

Christianson does not specifically teach that the plastic are ultrasonically weldable plastic. Christianson also does not teach the method of ultrasonically weldable plastic.

Kruger et al. teaches a device with ultrasonically weldable plastic and the method of using ultrasonically weldable plastic used for securely bonding two elements together. (See Col. 1, line 37 and Col. 2, line 12).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made from the teachings of Kruger et al. to have made the mounting bracket and support base of weldable plastic and to use the plastic for a secure bond between the elements.

Art Unit: 3632

Claims 6, 13, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 6648376 to Christianson and in view of United States Patent No. 4020575 to Kruger et al. as applied to claims 1, 2, 4, 5, 9 and 16 above and further in view of United States Patent No. 5842670 to Nigoghosian.

Christianson and Kruger et al. teach the basic inventive concept, including the method of installing a flexible sheath (10) around a solid metal rod (16).

Christianson and Kruger et al. do not teach that the rod is made from aluminum, copper or coated copper and the support base and mounting bracket are made of aluminum or the method of forming a support base and mounting bracket of weldable aluminum material.

Nigoghosian discloses applicant's basic inventive concept, all the elements which are shown above and including a solid flexible rod (14) or the rest of the device which is made from a weldable material such as copper or aluminum (See Col, 3, lines 38-39 for material selection), used because the properties of such a metal makes them weldable. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made from the teachings of Nigoghosian to have made the device of any suitable material or method of forming them from any suitable material, in order to easily attach the components to each other.

Claims 7, 19 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 6648376 to Christianson and in view of United States Patent No. 4020575 to Kruger et al. and in view of United States Patent No. 5842670 to

Nigoghosian as applied to claims 1, 2, 4-6, 16 and 17 above and further in view of United States Patent No. 6637642 to Lingnau.

Christianson, Kruger et al. and Nigoghosian show the basic inventive concept with the exception that they do not teach that the metal rod is made of upset metal finish or upset surface material or the method of upsetting the metal around the rod.

Lingnau discloses solid state welding including teaching that the upset finish of the metal can and will affect the welding profile. (See Col. 8, lines 6-24). Lingnau also teaches method of upsetting of the metal in order to change the welding profile. Therefore it would have been obvious to make the metal tubing with an upset finish on the surface, in order to further change the welding characteristics of the metal rod.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 6648376 to Christianson and in view of United States Patent No. 4020575 to Kruger et al. as applied to claim 10 above and further in view of United States Patent No. 6637642 to Lingnau

Christianson and Kruger et al. and show the basic inventive concept with the exception that they do not teach that the metal rod is made of upset metal finish or upset surface material.

Lingnau discloses solid state welding including teaching that the upset finish of the metal can and will affect the welding profile. (See Col. 8, lines 6-24). Therefore it would have been obvious to make the metal tubing with an upset finish on the surface, in order to further change the welding characteristics of the metal rod.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 6648376 to Christianson and in view of United States Patent No. 4020575 to Kruger et al. and in view of United States Patent No. 6637642 to Lingnau as applied to claims 10 and 11 above and in further view of United States Patent No. 5842670 to Nigoghosian.

Christianson, Kruger et al. and Lingnau do not teach that the rod made of aluminum, copper or coated copper.

Nigoghosian discloses applicant's basic inventive concept, all the elements which are shown above and including a solid flexible rod (14) which is made from a weldable material such as copper or aluminum (See Col, 3, lines 38-39 for material selection), used because the properties of such a metal makes them weldable. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made from the teachings of Nigoghosian to have made the rod of any suitable weldable material, in order to easily attach the components to each other.

Response to Arguments

The applicant has argued that Christianson does not teach a "solid" bendable metal rod. This is unpersuasive in that the term "solid" is not interpreted to mean "continuous" as argued by the applicant. The term is interpreted as a "solid material"

Art Unit: 3632

as opposed to a "liquid" or a "gas". Therefore, the Christianson reference meets the limitation thereof.

The applicant has also argued that Christianson and Nigoghosian teach away from the teachings. This argument is moot due to the new grounds of rejection above.

Conclusion

THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action. Any inquiry concerning this communication should be directed to Amy J. Sterling at telephone number 571-272-6823. The examiner can normally be reached (M-F 8 a.m.-5:00 p.m.). If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Leslie Braun can be

Art Unit: 3632

reached at 571-272-6815. The fax machine number for the Technology center is 703-872-9306 (formal amendments) or 571-273-6823 (informal amendments and communications). Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist at 571-272-3600.



AJS

Amy J. Sterling

4/9/05



RAMON O. RAMIREZ
PRIMARY EXAMINER